



## ProStar™ Remote Temperature Probe Manual

### OPERATION

The ProStar battery charging adjusts automatically for battery temperature. This remote probe allows the temperature to be measured accurately at the battery. The probe is encapsulated in epoxy inside a stainless steel housing for maximum protection from harsh environments.

The remote probe will correct for temperatures from -30°C to +80°C. The probe is also protected from lightning surges and short circuits.

As soon as the probe is soldered to the ProStar, the controller will begin to use the remote probe's temperature for charge control. If the probe should fail open or closed, the ProStar will automatically use the on-board temperature sensor for temperature corrections.

#### NOTE:

- The ProStar will not work with other temperature probes.
- The remote probe can only be used with ProStars manufactured after May 2001. (bar code label: after 0122xx - year 2001 / week 22)

For installation instructions, see the back of this page.

### TESTING

To confirm the remote probe is working correctly, a volt meter is required. With the ProStar in PWM charging (green "Battery Status" LED is flashing), change the temperature of the remote probe. If the probe is heated, the battery voltage at the battery terminals will decrease. If the probe is cooled, the battery voltage will increase.

These battery voltage changes occur slowly, and can take a few minutes to occur. Cooling in ice water will typically change the voltage faster. A small change in battery voltage is all that is required to verify the probe is working correctly.

### EXTEND CABLE LENGTH

If the battery is located more than 25 feet (7.6 meters) from the ProStar controller, the probe cable length can be extended up to 100 feet (30 meters).

It is recommended that the original remote probe cable be cut and the new cable soldered into the middle. This allows for the probe's original tinned wires to be soldered into the circuit board and ensures a proper fit. Solder the spliced wire connections and tape or seal the bare wires.

The new cable extension should be a shielded, twisted pair cable. The new wires should be at least 22 AWG (0.35 mm<sup>2</sup>), and a larger size (18 AWG / 1.0 mm<sup>2</sup>) is recommended for best performance.

### SPECIFICATIONS

- stainless steel housing: 0.208 inch diameter (5.3 mm) and 1 inch long (25 mm)
- 2-conductor copper cable with PVC jacket
- cable rated UL CMR
- accuracy +/- 1.5°C
- ProStars were tested with remote probes for CE certification (standard 25 ft length)
- probe noise is filtered

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